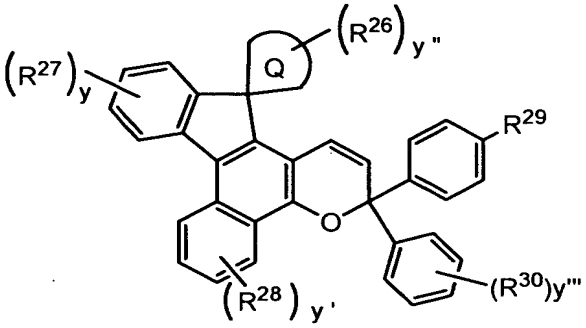
Claims (amended):

1. A photochromic optical article comprising an optical substrate having a photochromic layer which is formed on at least one surface thereof and contains a photochromic compound is dispersed in a resin, and thin metal oxide layer formed on said photochromic layer, wherein an indenonaphthopyran compound represented by following formula (8) is used as said photochromic compound;



...(8)

wherein,

R^{26}, R^{27}, R^{28} and R^{30} are respectively, hydroxyl groups, alkyl groups, trifluoromethyl groups, alkoxy groups, alkoxycarbonyl groups, carboxyl groups, alkoxymethyl groups, hydroxymethyl groups, aralkoxy groups, amino groups, substituted amino groups, cyano groups, nitro groups, halogen atoms, aralkyl groups, substituted or unsubstituted aryl groups, substituted or unsubstituted heteroaryl groups, substituted or unsubstituted heterocyclic groups having a nitrogen atom as a hetero atom and in which the nitrogen is bonded to the indenonaphtho ring, or condensed heterocyclic groups in which the heterocyclic group is condensed with an aromatic hydrocarbon ring or with an aromatic heterocyclic ring,

R^{29} is a dialkylamino group, or a substituted or unsubgstituted heterocyclic group having a nitrogen atom as a hetero atom and in which the hydrogen atom is

bonded to the phenyl group,

Ring Q is an aliphatic hydrocarbon cyclic group, and

y, y', y" and y"' are, respectively, integers of 0 to 2,

said photochromic layer has a thickness of 30 to 50 μm;

said thin metal oxide layer is formed by evaporation, has a thickness of 0.01 to 10 μm, is of a single-layer structure or of a laminated-layer structure of not more than three layers, and is formed on the photochromic layer via a buffur layer of a thickness of 0.1 to 20 μm; and

said buffer layer has an inorganic particle dispersion layer which contains inorganic particles in an amount of larger than 30% by mass but not larger than 60% by mass and is formed by dispersing said inorganic particles in a binder resin.

2. A photochromic optical article according to claim 1, wherein said thin metal oxide layer is formed by silicon oxide, titanium oxide, zirconium oxide, tin oxide, zinc oxide, cerium oxide, iron oxide or a composite oxide containing these oxide components.

3. A photochromic optical article according to claim 2, wherein said thin metal oxide layer is formed by silicon oxide.

4. A photochromic optical article according to claim 1, wherein said inorganic particles contained in the inorganic particle dispersion layer is silicon oxide, titanium oxide, zirconium oxide, tin oxide, zinc oxide, cerium oxide, iron oxide or a composite oxide containing these oxide components.

5. A photochromic optical article according to claim 1, wherein said binder resin in the inorganic particle dispersion layer is formed by the hydrolysis and condensation of an organosilicon compound.

6. A photochromic optical article according to claim 1, wherein said buffer layer comprises a primer layer formed on said photochromic layer ans said inorganic particle dispersion layer formed on said primer layer.

7. A photochromic optical article comprising an optical substrate having a photochromic layer which is formed on at least one surface thereof and contains a photochromic compound is dispersed in a resin, and thin metal oxide layer formed on said photochromic layer,

wherein an indenonaphthopyran compound is used as said photochromic compound, said photochromic layer has a thickness of 30 to 50 μm, and

said thin metal oxide layer comprises a silicon oxide layer having a thickness of 0.01 to 10 μm, said silicon oxide layer being formed by converting polysilazane in a thin polysilazane layer formed on the photochromic layer into silicon oxide.

8. A method of producing a photochromic optical article, comprising:

preparing an optical substrate having a photochromic layer of a thickness of 30 to 50 μm formed on at least one surface thereof and in which an indenonaphthopyran compound is dispersed in a resin;

forming a thin polysilazane layer on said photochromic layer by applying a coating solution containing at least a polysilazane followed, as required, by drying; and

converting polysilazane forming said thin layer into silicon oxide to thereby form a thin silicon oxide layer of a thickness of 0.01 to 10 μm.